LISTING OF THE CLAIMS

- 1 1. (Currently Amended) A method for doing call classification on a call to a destination endpoint, comprising the steps of: 2 receiving audio information from the destination endpoint; 3 analyzing received audio information for words using automatic 4 speech recognition; and-5 6 determining the call classification from the analyzed words where the call classification specifies at least one of the endpoint is busy 7 8 or the call is being redirected. 1 2. (Original) The method of claim 1 wherein the analyzed 2 words are formed as phrases.
- 1 3. (Original) The method of claim 1 wherein the step of 2 analyzing comprises performing front-end feature extraction on the received audio information to produce a full feature vector. 3
- 1 4. (Original) The method of claim 3 wherein the step of analyzing further comprises computing log likelihood probability from the 2 full feature vector. 3
- 5. (Original) The method of claim 4 wherein the step of 1 analyzing further comprises updating a dynamic programming network 2 used in the step of analyzing in response to the computed log likelihood 3 probability.

- 6. (Original) The method of claim 5 wherein the step of updating comprises the step of executing an Viterbi process.
- 7. (Original) The method of claim 5 further comprises the step of pruning the nodes in the dynamic programming network used in the step of analyzing.
- 8. (Original) The method of claim 7 further comprises the step of expanding a grammar network used in the step of analyzing.
- 9. (Original) The method of claim 8 further comprises the step of performing grammar backtracking in response to the expanded grammar network.
- 10. (Original) The method of claim 9 wherein the step of
 backtracking comprises the step of executing another Viterbi process.
- 1 11. (Original) The method of claim 1 wherein the step of determining comprises executing an inference engine in response to analyzed words.
- 1 12. (Original) The method of claim 11 further comprises the 2 step of analyzing the audio information to detect tones; and 3 the step of determining further responsive to the detection of 4 tones for determining the call classification.
- 1 13. (Original) The method of claim 12 further comprises the 2 step of analyzing the audio information to identify energy in the audio 3 information; and

4 the step of determining further responsive to the identification of 5 energy for determining the call classification. 1 14. (Original) The method of claim 13 further comprises the 2 step of analyzing the audio information to identify zero crossings in the 3 audio information; and 4 the step of determining further responsive to the identification of zero crossings for determining the call classification. 5 15. (Canceled) 1 1 16. (Canceled) 17. (Canceled) 1 1 18. (Canceled) 19. (Canceled) 1 1 20. (Canceled). 1 21. (Currently Amended) An apparatus for classifying a call to 2 a called destination endpoint, comprising: 3 a receiver for receiving audio information from the called destination endpoint; 4 5 automatic speech recognizer for determining words in the 6 received audio information; and 7 an inference engine for classifying the call destination endpoint in response to the determined words where the classifying specifies at 8 least one of the endpoint is busy or the call is being redirected. 9

- 1 22. (Original) The apparatus of claim 21 wherein the 2 determined words are formed as phrases.
- 1 23. (Original) The apparatus of claim 21 further comprises an
- analyzer for determining another classification from the received audio 2
- information. 3
- 1 24. (Original) The apparatus of claim 23 wherein the analyzer
- 2 is one of a tone detector, energy detector, or a zero crossings detector.
- 1 25. (Original) The apparatus of claim 24 wherein the automatic
- 2 speech recognizer is executing a Hidden Markov Model.